Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Cancel claims 1-9.

10. (currently amended) A cover for operative sealing securement to a multi-well plate having a surface defining a plurality of wells therein, the cover comprising:

a lid sized to overlie the multi-well plate, the lid comprising:

a curvilinear upper section dimensioned to overlie the multi-well plate surface and formed of a resiliently flexible material, said curvilinear upper section having a concave shape in an initial, un-flexed position, and

a plurality of side walls integrally depending at an end thereof from sides of the upper section of the lid and extending substantially perpendicular to the upper section for grasping engagement with the multi-well plate to secure the lid sealingly to the multi-well plate, the side walls being formed of the resiliently flexible material of the lid so that, when the lid is positioned above the surface of the multi-well plate and downward force is applied to the lid to press the cover against the multi-well plate, the curvilinear concave shaped upper section resiliently deforms to cause the side walls to resiliently flex about the multi-well plate and, with continued application of downward force, the side walls resiliently grasp the multi-well plate to thereby straighten said upper section to a final, flexed position whereby ~~secure~~ the lid is secured to the multi-well plate with the upper section in closely overlying relation to the multi-well plate surface; and

a gasket fixed to an underside of the lid and dimensioned to compressingly abut the surface of the multi-well plate when the lid is sealingly secured to the multi-well plate and

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thereby seal the wells against ingress and egress of fluids and materials when the lid is sealingly secured to the multi-well plate.

11. (previously presented) The cover of claim 10, wherein the side walls further include notched tabs with locator holes for facilitating the gripping of the cover by mechanical handling apparatus.

12. (previously presented) The cover of claim 10, wherein the side walls further include stacking lugs projecting downward from the side walls.

13. (previously presented) The cover of claim 10, wherein the side walls further include means for aligning the cover with an adjacent cover when the cover is in a stack of like covers.

14. (previously presented) The cover of claim 13, wherein the side walls further include stacking lugs projecting downward from the side walls.

15. (previously presented) The cover of claim 14, wherein the means for aligning includes stacking locators positioned in the side walls, the stacking locators being positioned to engage the stacking lugs of the adjacent cover.

16. (previously presented) The cover of claim 10, wherein each side wall includes a clamp for engaging an edge of the multi-well plate, the clamp being located on the side wall at

an end opposite to the end of the side wall at which the side wall depends from the upper section of the lid.

17. (previously presented) The cover of claim 10, wherein the gasket comprises a thermoplastic polymer having a durometer of Shore 15A and having a high degree of chemical resistance to dimethyl sulfoxide.

18. (previously presented) The cover of claim 10, wherein the gasket comprises an elastomer having a durometer of Shore 15A and having a high degree of chemical resistance to dimethyl sulfoxide.

19. (previously presented) The cover of claim 10, wherein the lid is formed of a material selected from the group consisting of steel, stainless steel, spring steel and stainless spring steel, and has a thickness of between about 0.015" and about 0.024".

20. (previously presented) The cover of claim 10, wherein the curvilinear upper section of the lid is curved so that when the curvilinear upper section is at rest, and a point of the gasket intermediate the sides of the lid contacts the upper surface of the multi-well plate, sides of the gasket affixed to the sides of the underside of the upper section of the lid are not in contact with the upper surface of the multi-well plate.

21. (previously presented) The cover of claim 20, wherein when the side walls are resiliently flexed about the multi-well plate, the sides of the upper section are urged towards the

upper surface of the multi-well plate, and thereby exert a compressing force on the gasket to compress the gasket between the underside of the lid and the upper surface of the multi-well plate, so that the wells in the multi-well plate are sealed.

22. (currently amended) An assembly of a multi-well plate and a cover for the multi-well plate, wherein:

the plate comprises

an upper surface,

a plurality of wells having openings disposed in the upper surface, and

a skirt disposed on an edge of the plate; and

a cover for operative sealing securement to a multi-well plate having a surface defining ~~a~~ said plurality of wells therein, the cover comprising:

a lid sized to overlie the multi-well plate, the lid comprising:

~~an~~ a curvilinear upper section dimensioned to overlie the multi-well plate surface and formed of a resiliently flexible material, said curvilinear upper section having a concave shape in an initial, un-flexed position, and

a plurality of side walls integrally depending from sides of the upper section of the lid and extending substantially perpendicular to the upper section for grasping engagement with the multi-well plate to secure the lid sealingly to the multi-well plate, the side walls being formed of the resiliently flexible material of the lid so that, when the lid is positioned above the surface of the multi-well plate and downward force is applied to the lid to press the cover against the multi-well plate, the curvilinear concave shaped upper section

resiliently deforms to cause the side walls to resiliently flex about the multi-well plate and, with continued application of downward force, the side walls resiliently grasp the multi-well plate to straighten said upper section to a final, flexed position whereby ~~thereby secure~~ the lid is secured to the multi-well plate with the upper section in closely overlying relation to the multi-well plate surface; and

a gasket fixed to an underside of the lid and dimensioned to compressingly abut the surface of the multi-well plate when the lid is sealingly secured to the multi-well plate and thereby seal the wells against ingress and egress of fluids and materials when the lid is sealingly secured to the multi-well plate.

23. (previously presented) The assembly of claim 22, wherein the upper section of the lid is curvilinear.

24. (previously presented) The assembly of claim 22, wherein the upper section of the lid is curved so that when the upper section is at rest, and a point of the gasket intermediate the sides of the lid contacts the upper surface of the multi-well plate, sides of the gasket affixed to the sides of the lid are not in contact with the upper surface of the multi-well plate.

25. (previously presented) The assembly of claim 24, wherein when the side walls are flexed about the multi-well plate, the sides of the lid are urged towards the upper surface of the plate, and thereby exert a compressing force on the gasket to compress the gasket between the underside of the lid and the upper surface of the multi-well plate, so that the wells in the multi-well plate are sealed.